

SEQUENCE LISTING

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<120> INTERFERON-ALPHA INDUCED GENE

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<210> 1

<211> 8157

<212> DNA

<213> HOMO SAPIENS

<220>

<221> CDS

<222> (101)..(5902)

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 Ser Phe Pro Leu Leu Val Glu Gly Ser Trp Gly Pro Asp Pro Pro Lys
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 Asn Leu Asn Thr Lys Leu Gln Met Tyr Phe Gln Ser Pro Lys Arg Ser
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gga ggc ggc gag tgt gag gtc cgc cag gat ccc agg agc cca tcc cgc 259
 Gly Gly Gly Glu Cys Glu Val Arg Gln Asp Pro Arg Ser Pro Ser Arg
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 Phe Leu Val Phe Phe Tyr Pro Glu Asp Gly Lys Trp Arg Gln Gly Thr
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 His Gly Arg Val Thr Arg Pro Thr Ser Ala Ala Val Ala Glu Ala
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Leu Asn Gly Ala Ala Arg Arg Trp Arg Arg Asn Arg Ala Ser Asn Ser	
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Leu Ser Leu Asp Arg Phe Leu Ser Phe Pro Val Val Val Val Leu Leu	
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Phe Val Val Val Val Val Glu Val Ser Leu Ser Ser Tyr His Pro Phe	
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Leu Ser Phe Pro Val Val Ile Ile Leu Val Trp Gly Arg Lys Leu Ile	
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Lys Lys Arg Gly Lys Ser Gln Arg Phe Leu Val Val Leu Gly Asp Ser	
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Gln Gly Ser Arg Gly His Leu Gly Glu Gly Gln Arg Arg Tyr Leu Lys	
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Ser His Cys Leu Asn Val Asn Val Glu Pro Ser Gln Arg Pro His Trp	
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Arg Gly Cys Arg Ser Thr Thr Val Arg Gln Lys Val Leu Glu Arg Lys	
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Asn His Glu Leu Val Trp Gln Gly Lys Gly Thr Phe Lys Leu Thr Val	
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Gln Leu Pro Ala Thr Pro Asp Glu Ile Asp His Val Phe Glu Glu Glu	
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Leu Leu Thr Lys Ala Asn Val Ser Glu Glu Leu Asp Thr Lys Leu Pro	
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Leu Asp Gly Gly Leu Asp Lys Met Glu Asp Ile Pro Glu Glu Cys Glu	
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Asn Ile Ser Ser Leu Val Ala Phe Glu Asn Leu Lys Ala Asn Val Thr	
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Asp Ile Met Leu Ile Leu Leu Val Glu Asn Ile Ser Gly Leu Ser Asn	
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Lys His His Ser Ile Lys Gln Leu Gln Leu Ser Pro Arg Leu Leu Glu				
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Val Thr Asn Thr Ile Arg Val Glu Asn Leu Pro Pro Gly Ala Asp Asp				
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Tyr Ser Leu Lys Leu Phe Phe Glu Asn Pro Tyr Asn Gly Gly Gly Arg				
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Val Ala Asn Val Glu Tyr Phe Pro Glu Glu Ser Ser Ala Leu Ile Glu				
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Phe Phe Asp Arg Lys Val Leu Asp Thr Ile Met Ala Thr Lys Leu Asp				
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Thr Ala Leu Tyr Gly Lys Glu Lys Pro Leu Ile Lys Leu Pro Ala Pro				
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Phe Glu Glu Ser Leu Asp Leu Pro Leu Trp Lys Phe Leu Gln Lys Lys				
455	460	465		
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Asn His Leu Ile Glu Glu Ile Asn Asp Glu Met Arg Arg Cys His Cys				
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Glu Leu Thr Trp Ser Gln Leu Ser Gly Lys Val Thr Ile Arg Pro Ala				
490	495	500		
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Ala Thr Leu Val Asn Glu Gly Arg Pro Arg Ile Lys Thr Trp Gln Ala				
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gat act tcc aca aca ctc tct agc atc agg tct aaa tat aaa gtc aac				1699
Asp Thr Ser Thr Thr Leu Ser Ser Ile Arg Ser Lys Tyr Lys Val Asn				
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cca att aaa gtg gat cca aca atg tgg gac acc ata aaa aat gat gtg				1747
Pro Ile Lys Val Asp Pro Thr Met Trp Asp Thr Ile Lys Asn Asp Val				
535	540	545		

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gag att tgt tac gat aga gtc act caa cac ttg tgc ttg aaa gga cct Glu Ile Cys Tyr Asp Arg Val Thr Gln His Leu Cys Leu Lys Gly Pro 630 635 640 645	2035
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775 780 785	
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Ala Ala Ala Leu Ser Lys Ala Ala Gly Pro Glu Leu Gln Ala Asp Cys	
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Asp Gln Ile Val Lys Arg Glu Gly Arg Leu Leu Pro Gly Asn Ala Thr	
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Val Gly Pro Arg Trp Ser Gly Tyr Glu Ala Pro Arg Cys Val Tyr	
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Tyr Lys Tyr Arg Ser Ile Ala Ile Pro Ala Ile Ser Ser Gly Val	
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1195 1200 1205	
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Val Leu Lys Thr Ser Ser Trp Asn Leu Asp Cys Arg Tyr Val Leu	

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His Val Val Ala Pro Glu Trp Arg Asn Gly Ser Thr Ser Ser Leu			
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Lys Ile Met Glu Asp Ile Ile Arg Glu Cys Met Glu Ile Thr Glu			
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agc ttg tcc tta aaa tca att gca ttt cca gca ata gga aca gga			3901
Ser Leu Ser Leu Lys Ser Ile Ala Phe Pro Ala Ile Gly Thr Gly			
1255	1260	1265	
aac ttg gga ttt cct aaa aac ata ttc gct gaa tta atc att tca			3946
Asn Leu Gly Phe Pro Lys Asn Ile Phe Ala Glu Leu Ile Ile Ser			
1270	1275	1280	
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Glu Val Phe Lys Phe Ser Ser Lys Asn Gln Leu Lys Thr Leu Gln			
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Glu Val His Phe Leu Leu His Pro Ser Asp His Glu Asn Ile Gln			
1300	1305	1310	
gca ttt tca gat gaa ttt gcc aga agg gct aat gga aat ctc gtc			4081
Ala Phe Ser Asp Glu Phe Ala Arg Arg Ala Asn Gly Asn Leu Val			
1315	1320	1325	
agt gac aaa att ccg aag gct aaa gat aca caa ggt ttt tat ggg			4126
Ser Asp Lys Ile Pro Lys Ala Lys Asp Thr Gln Gly Phe Tyr Gly			
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Thr Val Ser Ser Pro Asp Ser Gly Val Tyr Glu Met Lys Ile Gly			
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Ser Ile Ile Phe Gln Val Ala Ser Gly Asp Ile Thr Lys Glu Glu			
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Thr Asp Val Ile Val Asn Ser Thr Ser Asn Ser Phe Asn Leu Lys			
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Ala Gly Val Ser Lys Ala Ile Leu Glu Cys Ala Gly Gln Asn Val			
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gaa agg gaa tgt tct cag caa gct cag cag cgc aaa aat gat tat			4351
Glu Arg Glu Cys Ser Gln Gln Ala Gln Gln Arg Lys Asn Asp Tyr			
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Gln Glu Cys Glu Lys Lys Asn Tyr Ser Ser Ile Cys Leu Pro Ala	
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Ile Gly Thr Gly Asn Ala Lys Gln His Pro Asp Lys Val Ala Glu	
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Ala Ile Ile Asp Ala Ile Glu Asp Phe Val Gln Lys Gly Ser Ala	
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Gln Ser Val Lys Lys Val Lys Val Val Ile Phe Leu Pro Gln Val	
1495 1500 1505	
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Leu Asp Val Phe Tyr Ala Asn Met Lys Lys Arg Glu Gly Thr Gln	
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Val Thr Cys Val Glu Tyr Ala Ile Ser Trp Leu Gln Asp Leu Ile	
1570 1575 1580	
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Glu Lys Glu Gln Cys Pro Tyr Thr Ser Glu Asp Glu Cys Ile Lys	
1585 1590 1595	
gac ttt gat gaa aag gag tat cag gag ttg aat gag ctg cag aag	4936
Asp Phe Asp Glu Lys Glu Tyr Gln Glu Leu Asn Glu Leu Gln Lys	
1600 1605 1610	
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Lys Leu Asn Ile Asn Ile Ser Leu Asp His Lys Arg Pro Leu Ile	
1615 1620 1625	
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Ile Glu Ala Met Ile Lys Arg Val Arg Leu Ala Lys Glu Gln Glu	
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Ser Arg Ala Asp Cys Ile Ser Glu Phe Ile Glu Trp Gln Tyr Asn	
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Asp Asn Asn Thr Ser His Cys Phe Asn Lys Met Thr Asn Leu Lys	
1675 1680 1685	
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Leu Glu Asp Ala Arg Arg Glu Lys Lys Lys Thr Val Asp Val Lys	
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Ile Asn His Arg His Tyr Thr Val Asn Leu Asn Thr Tyr Thr Ala	
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Ser Lys Val Asp Ile Pro Ala His Trp Ser Asp Met Lys Gln Gln	
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Asn Phe Cys Val Val Glu Leu Leu Pro Ser Asp Pro Glu Tyr Asn	
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Thr Val Ala Ser Lys Phe Asn Gln Thr Cys Ser His Phe Arg Ile	
1765 1770 1775	
gag aag att gag agg atc cag aat cca gat ctc tgg aat agc tac	5476
Glu Lys Ile Glu Arg Ile Gln Asn Pro Asp Leu Trp Asn Ser Tyr	
1780 1785 1790	
cag gca aag aaa aaa act atg gat gcc aag aat ggc cag aca atg	5521
Gln Ala Lys Lys Lys Thr Met Asp Ala Lys Asn Gly Gln Thr Met	
1795 1800 1805	
aat gag aag caa ctc ttc cat ggg aca gat gcc ggc tcc gtg cca	5566
Asn Glu Lys Gln Leu Phe His Gly Thr Asp Ala Gly Ser Val Pro	
1810 1815 1820	
cac gtc aat cga aat ggc ttt aac cgc agc tat gcc gga aag aat	5611
His Val Asn Arg Asn Gly Phe Asn Arg Ser Tyr Ala Gly Lys Asn	
1825 1830 1835	
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Ala Val Ala Tyr Gly Lys Gly Thr Tyr Phe Ala Val Asn Ala Asn	
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tat tct gcc aat gat acg tac tcc aga cca gat gca aat ggg aga	5701

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Lys His Val	Tyr Tyr Val Arg Val	Leu Thr Gly Ile Tyr	Thr His		
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gga aat cat	tca tta att gtg cct	cct tca aag aac cct	caa aat	5791	
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1885	1890	1895			
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Pro Thr Asp	Leu Tyr Asp Thr Val	Thr Asp Asn Val His	His Pro		
1900	1905	1910			
agt tta ttt	gtg gca ttt tat gac	tac caa gca tac cca	gag tac	5881	
Ser Leu Phe	Val Ala Phe Tyr Asp	Tyr Gln Ala Tyr Pro	Glu Tyr		
1915	1920	1925			
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Leu Ile Thr	Phe Arg Lys				
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<213> HOMO SAPIENS

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Val	Leu	Gly	Asp	Ser	Gln	Gly	Ser	Arg	Gly	His	Leu	Gly	Glu	Gly	Gln
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Arg	Arg	Tyr	Leu	Lys	Ser	His	Cys	Leu	Asn	Val	Asn	Val	Glu	Pro	Ser
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Gln	Arg	Pro	His	Trp	Arg	Gly	Cys	Arg	Ser	Thr	Thr	Val	Arg	Gln	Lys
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Phe	Lys	Leu	Thr	Val	Gln	Leu	Pro	Ala	Thr	Pro	Asp	Glu	Ile	Asp	His
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Val	Phe	Glu	Glu	Glu	Leu	Leu	Thr	Lys	Ala	Asn	Val	Ser	Glu	Glu	Leu
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Lys	Ala	Asn	Val	Thr	Asp	Ile	Met	Leu	Ile	Leu	Leu	Val	Glu	Asn	Ile
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Asp	Val	Ala	Val	Val	Thr	Phe	Gln	Lys	His	Ile	Asp	Thr	Ile	Arg	Phe
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Val	Asp	Asp	Cys	Thr	Lys	His	His	Ser	Ile	Lys	Gln	Leu	Gln	Leu	Ser

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Pro	Gly	Ala	Asp	Asp	Tyr	Ser	Leu	Lys	Leu	Phe	Phe	Glu	Asn	Pro	Tyr	
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Ser	Ala	Leu	Ile	Glu	Phe	Phe	Asp	Arg	Lys	Val	Leu	Asp	Thr	Ile	Met	
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Ala	Thr	Lys	Leu	Asp	Phe	Asn	Lys	Met	Pro	Leu	Ser	Val	Phe	Pro	Tyr	
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Phe	Leu	Gln	Lys	Lys	Asn	His	Leu	Ile	Glu	Glu	Ile	Asn	Asp	Glu	Met	
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Arg	Arg	Cys	His	Cys	Glu	Leu	Thr	Trp	Ser	Gln	Leu	Ser	Gly	Lys	Val	
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Thr	Ile	Arg	Pro	Ala	Ala	Thr	Leu	Val	Asn	Glu	Gly	Arg	Pro	Arg	Ile	
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Lys	Thr	Trp	Gln	Ala	Asp	Thr	Ser	Thr	Thr	Leu	Ser	Ser	Ile	Arg	Ser	
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Lys	Tyr	Lys	Val	Asn	Pro	Ile	Lys	Val	Asp	Pro	Thr	Met	Trp	Asp	Thr	
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Ile	Lys	Asn	Asp	Val	Lys	Asp	Asp	Arg	Ile	Leu	Ile	Glu	Phe	Asp	Thr	
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Leu	Lys	Glu	Met	Val	Ile	Leu	Ala	Gly	Lys	Ser	Glu	Asp	Val	Gln	Ser	
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Tyr	Leu	Lys	Thr	Glu	Lys	Lys	Leu	Phe	Trp	Pro	Lys	Ile	Lys	Lys	Val	
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Gln	Val	Trp	Asp	Ser	Val	Cys	Val	Lys	Ser	Val	His	Thr	Asp	Lys	Pro	
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Pro	Gly	Asn	Ala	Thr	Ile	Ser	Lys	Ala	Gly	Lys	Leu	Pro	Tyr	His	His	995	1000	1005	
Val	Ile	His	Ala	Val	Gly	Pro	Arg	Trp	Ser	Gly	Tyr	Glu	Ala	Pro	1010	1015	1020		
Arg	Cys	Val	Tyr	Leu	Leu	Arg	Arg	Ala	Val	Gln	Leu	Ser	Leu	Cys	1025	1030	1035		
Leu	Ala	Glu	Lys	Tyr	Lys	Tyr	Arg	Ser	Ile	Ala	Ile	Pro	Ala	Ile	1040	1045	1050		
Ser	Ser	Gly	Val	Phe	Gly	Phe	Pro	Leu	Gly	Arg	Cys	Val	Glu	Thr	1055	1060	1065		
Ile	Val	Ser	Ala	Ile	Lys	Glu	Asn	Phe	Gln	Phe	Lys	Lys	Asp	Gly	1070	1075	1080		
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Val	Glu	Ala	Phe	Ala	Glu	Ala	Val	Lys	Thr	Val	Phe	Lys	Ala	Thr	1100	1105	1110		
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Arg	Tyr	Val	Leu	His	Val	Val	Ala	Pro	Glu	Trp	Arg	Asn	Gly	Ser	1220	1225	1230		

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1580						1585					1590			
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1760						1765					1770			
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Gly Gln Thr Met Asn Glu Lys Gln Leu Phe His Gly Thr Asp Ala				
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Gly Ser Val Pro His Val Asn Arg Asn Gly Phe Asn Arg Ser Tyr				
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Ala Gly Lys Asn Ala Val Ala Tyr Gly Lys Gly Thr Tyr Phe Ala				
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Val Asn Ala Asn Tyr Ser Ala Asn Asp Thr Tyr Ser Arg Pro Asp				
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Ala Asn Gly Arg Lys His Val Tyr Tyr Val Arg Val Leu Thr Gly				
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Asn Pro Gln Asn Pro Thr Asp Leu Tyr Asp Thr Val Thr Asp Asn				
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Lys Glu Glu Ala Asp Val Ile Val Asn Ser Thr Ser Asn Ser Phe Asn	
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ctc aaa gca ggg gtc tcc aaa gca att tta gaa tgt gct gga caa aat	293
Leu Lys Ala Gly Val Ser Lys Ala Ile Leu Glu Cys Ala Gly Gln Asn	
75 80 85	
gta gaa agg gaa tgt tct cag caa gct cag cag cgc aaa aat gat tat	341
Val Glu Arg Glu Cys Ser Gln Gln Ala Gln Gln Arg Lys Asn Asp Tyr	
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Ile Ile Thr Gly Gly Gly Phe Leu Arg Cys Lys Asn Ile Ile His Val	
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att ggt gga aat gat gtc aag agt tca gtt tcc tct gtt ttg cag gag	437
Ile Gly Gly Asn Asp Val Lys Ser Ser Val Ser Ser Val Leu Gln Glu	
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tgt gaa aaa aaa aat tac tca tcc att tgc ctc cca gcc att ggg aca	485
Cys Glu Lys Lys Asn Tyr Ser Ser Ile Cys Leu Pro Ala Ile Gly Thr	
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gga aat gcc aaa caa cac cca gat aag gtt gct gaa gcc ata att gat	533
Gly Asn Ala Lys Gln His Pro Asp Lys Val Ala Glu Ala Ile Ile Asp	
155 160 165	
gcc att gaa gac ttt gtc cag aaa gga tca gcc cag tct gtg aaa aaa	581
Ala Ile Glu Asp Phe Val Gln Lys Gly Ser Ala Gln Ser Val Lys Lys	
170 175 180	
gtt aaa gtt gtt atc ttt ctg cct caa gta ctg gat gtg ttt tat gct	629
Val Lys Val Val Ile Phe Leu Pro Gln Val Leu Asp Val Phe Tyr Ala	
185 190 195	
aac atg aag aaa aga gaa ggg act cag ctt tct tcc caa cag tct gtg	677
Asn Met Lys Lys Arg Glu Gly Thr Gln Leu Ser Ser Gln Gln Ser Val	
200 205 210	
atg tct aaa ctt gca tca ttt ttg ggc ttt tca aag caa tct ccc caa	725
Met Ser Lys Leu Ala Ser Phe Leu Gly Phe Ser Lys Gln Ser Pro Gln	
215 220 225 230	
aaa aag aat cat ttg gtt ttg gaa aag aaa aca gaa tca gca act ttt	773
Lys Lys Asn His Leu Val Leu Glu Lys Lys Thr Glu Ser Ala Thr Phe	
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cgg gtg tgt ggt gaa aat gtc acg tgt gtg gaa tat gct atc tcc tgg	821
Arg Val Cys Gly Glu Asn Val Thr Cys Val Glu Tyr Ala Ile Ser Trp	
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cta caa gac ctg att gaa aaa gaa cag tgt cct tac acc agt gaa gat	869
Leu Gln Asp Leu Ile Glu Lys Glu Gln Cys Pro Tyr Thr Ser Glu Asp	
265 270 275	

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Gly Arg Lys His Val Tyr Tyr Val Arg Val Leu Thr Gly Ile Tyr Thr	
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His Gly Asn His Ser Leu Ile Val Pro Pro Ser Lys Asn Pro Gln Asn	
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Pro Thr Asp Leu Tyr Asp Thr Val Thr Asp Asn Val His His Pro Ser	
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Leu Phe Val Ala Phe Tyr Asp Tyr Gln Ala Tyr Pro Glu Tyr Leu Ile	
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Thr Phe Arg Lys	
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<211> 618
<212> PRT
<213> Homo sapiens

<400> 4

Met Asn Leu Pro Arg Arg Val Lys Glu Asn Leu Val Ser Asp Lys Phe

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Pro Lys Ala Lys Asp Thr Gln Gly Phe Tyr Gly Thr Val Ser Ser Pro	20	25	30
Asp Ser Gly Val Tyr Glu Met Lys Ile Gly Ser Ile Ile Phe Gln Val	35	40	45
Ala Ser Gly Asp Ile Thr Lys Glu Glu Ala Asp Val Ile Val Asn Ser	50	55	60
Thr Ser Asn Ser Phe Asn Leu Lys Ala Gly Val Ser Lys Ala Ile Leu	65	70	75
Glu Cys Ala Gly Gln Asn Val Glu Arg Glu Cys Ser Gln Gln Ala Gln	85	90	95
Gln Arg Lys Asn Asp Tyr Ile Ile Thr Gly Gly Gly Phe Leu Arg Cys	100	105	110
Lys Asn Ile Ile His Val Ile Gly Gly Asn Asp Val Lys Ser Ser Val	115	120	125
Ser Ser Val Leu Gln Glu Cys Glu Lys Lys Asn Tyr Ser Ser Ile Cys	130	135	140
Leu Pro Ala Ile Gly Thr Gly Asn Ala Lys Gln His Pro Asp Lys Val	145	150	155
Ala Glu Ala Ile Ile Asp Ala Ile Glu Asp Phe Val Gln Lys Gly Ser	165	170	175
Ala Gln Ser Val Lys Lys Val Lys Val Val Ile Phe Leu Pro Gln Val	180	185	190
Leu Asp Val Phe Tyr Ala Asn Met Lys Lys Arg Glu Gly Thr Gln Leu	195	200	205
Ser Ser Gln Gln Ser Val Met Ser Lys Leu Ala Ser Phe Leu Gly Phe	210	215	220
Ser Lys Gln Ser Pro Gln Lys Lys Asn His Leu Val Leu Glu Lys Lys	225	230	235
Thr Glu Ser Ala Thr Phe Arg Val Cys Gly Glu Asn Val Thr Cys Val	245	250	255
Glu Tyr Ala Ile Ser Trp Leu Gln Asp Leu Ile Glu Lys Glu Gln Cys	260	265	270
Pro Tyr Thr Ser Glu Asp Glu Cys Ile Lys Asp Phe Asp Glu Lys Glu	275	280	285
Tyr Gln Glu Leu Asn Glu Leu Gln Lys Lys Leu Asn Ile Asn Ile Ser	290	295	300
Leu Asp His Lys Arg Pro Leu Ile Lys Val Leu Gly Ile Ser Arg Asp			

305		310		315		320
Val Met Gln Ala Arg Asp Glu Ile Glu Ala Met Ile Lys Arg Val Arg						
		325		330		335
Leu Ala Lys Glu Gln Glu Ser Arg Ala Asp Cys Ile Ser Glu Phe Ile						
		340		345		350
Glu Trp Gln Tyr Asn Asp Asn Asn Thr Ser His Cys Phe Asn Lys Met						
		355		360		365
Thr Asn Leu Lys Leu Glu Asp Ala Arg Arg Glu Lys Lys Lys Thr Val						
		370		375		380
Asp Val Lys Ile Asn His Arg His Tyr Thr Val Asn Leu Asn Thr Tyr						
		385		390		395
Thr Ala Thr Asp Thr Lys Gly His Ser Leu Ser Val Gln Arg Leu Thr						
		405		410		415
Lys Ser Lys Val Asp Ile Pro Ala His Trp Ser Asp Met Lys Gln Gln						
		420		425		430
Asn Phe Cys Val Val Glu Leu Leu Pro Ser Asp Pro Glu Tyr Asn Thr						
		435		440		445
Val Ala Ser Lys Phe Asn Gln Thr Cys Ser His Phe Arg Ile Glu Lys						
		450		455		460
Ile Glu Arg Ile Gln Asn Pro Asp Leu Trp Asn Ser Tyr Gln Ala Lys						
		465		470		475
Lys Lys Thr Met Asp Ala Lys Asn Gly Gln Thr Met Asn Glu Lys Gln						
		485		490		495
Leu Phe His Gly Thr Asp Ala Gly Ser Val Pro His Val Asn Arg Asn						
		500		505		510
Gly Phe Asn Arg Ser Tyr Ala Gly Lys Asn Ala Val Ala Tyr Gly Lys						
		515		520		525
Gly Thr Tyr Phe Ala Val Asn Ala Asn Tyr Ser Ala Asn Asp Thr Tyr						
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Ser Arg Pro Asp Ala Asn Gly Arg Lys His Val Tyr Tyr Val Arg Val						
		545		550		555
Leu Thr Gly Ile Tyr Thr His Gly Asn His Ser Leu Ile Val Pro Pro						
		565		570		575
Ser Lys Asn Pro Gln Asn Pro Thr Asp Leu Tyr Asp Thr Val Thr Asp						
		580		585		590
Asn Val His His Pro Ser Leu Phe Val Ala Phe Tyr Asp Tyr Gln Ala						
		595		600		605

Tyr Pro Glu Tyr Leu Ile Thr Phe Arg Lys
610 615